

# EMC NetWorker: Complete Protection for Microsoft Hyper-V

## The Big Picture

- Provides flexible protection and recovery of virtual servers
- Ensures quick restore and off-host backup through instant low-impact snaps and clones
- Provides easy scheduling and management
- Ensures valuable corporate data is safe and available
- Eliminates the need for scripting
- Provides single-step recovery from disk or tape

## Data protection for Microsoft virtualization

Microsoft Hyper-V, available with Windows Server 2008, enables increased hardware utilization and accelerates server deployment and management. Virtualization also makes possible new options to store, protect, and optimize information. Now EMC delivers the first complete solution for backup and recovery of Hyper-V to help you effectively and efficiently protect virtual servers and realize the cost, service-level, and agility benefits that Microsoft virtualization technologies deliver.

### Complete backup and recovery with EMC NetWorker

EMC® NetWorker® enterprise backup and recovery software centralizes, automates, and accelerates data protection across heterogeneous IT environments. To protect Hyper-V, NetWorker leverages the Microsoft Volume Shadow Copy Service (VSS) to deliver snapshot-based protection and recovery for the entire Hyper-V server environment, including parent and child partitions (guests).

The EMC NetWorker Module for Microsoft Applications provides a single, unified solution that not only protects Hyper-V and Windows Server 2008, but also enables non-disruptive backup of the applications running within virtual machines including Microsoft Exchange Server, SQL Server, and Microsoft Office SharePoint Server.

NetWorker takes advantage of hardware-based VSS snapshots to deliver off-host and LAN-free backup to disk, tape, or virtual tape—reducing the impact of backup and delivering several significant benefits, including the following:

- Eliminates traffic from your network
- Improves the performance of production virtual machines
- Helps you get the most value from server virtualization

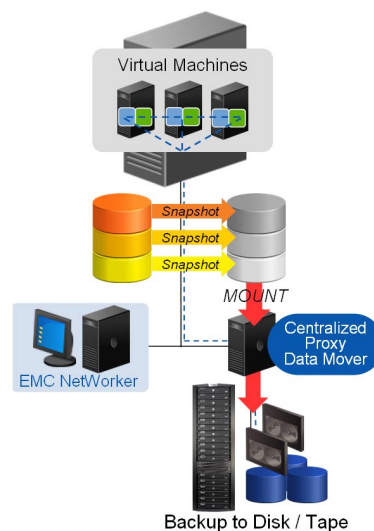
### Hyper-V parent partition backup

At the parent level, NetWorker simplifies full protection for the Hyper-V physical server. Users can easily backup and recover the server operating system, system state, data volumes, and Hyper-V configuration database. Leveraging the Hyper-V VSS Writer, NetWorker also executes full-image backups or snapshots of Hyper-V child partitions.

VSS quiesces the Windows operating system as well as the applications within the child partition (guest) for OS and application consistency. NetWorker supports all Hyper-V guest operating systems, including Windows Server 2008, Windows Server 2003, Windows Vista, Windows XP, and SUSE Linux. Support for off-host backup eliminates performance impacts from production Hyper-V servers.

### Hyper-V child partition backup

Within the child partition, NetWorker executes application-consistent backups of Exchange, SQL, and SharePoint. Application aware backups provide fine grain recovery with application log management to ensure maximum flexibility in the recovery of data. Support for off-host backup of child partitions removes the impact of backup from production Hyper-V servers.



*EMC NetWorker delivers quick off-host backup of entire Hyper-V environments*

### Flexible recovery to meet demanding service levels

The persistent snapshot management of NetWorker enables fast and efficient snapshot restore and rollback for quick Hyper-V recovery. Hyper-V data saved on secondary media such as disk, virtual tape, or tape is also quickly recovered in a single step when needed. To ensure recoverability in dynamic virtual environments, data can be directed to original or alternate locations.

### Application support

Microsoft Exchange Server 2007 (SP1) x64  
 Microsoft Exchange Server 2003 (SP1/SP2) x86  
 Microsoft SQL Server 2005 (SP2) x64/x86  
 Microsoft SQL Server 2000 (SP4) x86  
 Microsoft Office SharePoint Server 2007 (SP1) x64/x86  
 Microsoft Office SharePoint Server 2003 (SP1) x64/x86  
 Windows SharePoint Services 3.0 and 2.0

### VSS provider support

Windows VSS System Provider  
 EMC VSS Hardware Provider (EMC Symmetrix®, EMC CLARiiON®, EMC Celerra®)  
 Dell EqualLogic VSS Hardware Provider  
 IBM System Storage DS6000 and DS8000 VSS Hardware Provider



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### Take the next step

For more information on EMC NetWorker and other EMC backup and recovery solutions, visit [www.EMC.com](http://www.EMC.com) or call 800.607.9546 (outside the U.S.: +1.925.600.5802).